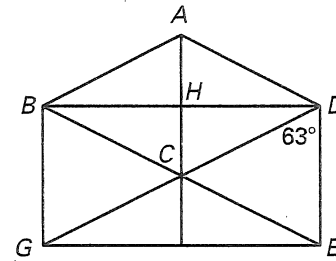


**Practice C**

For use with pages 347–355

In the diagram shown,  $BDEG$  is a rectangle and  $ABCD$  is a rhombus. Find the measure of the indicated angle.



1.  $\angle GDB$
2.  $\angle ABC$
3.  $\angle DAB$
4.  $\angle BCG$
5.  $\angle GCE$
6.  $\angle DEG$
7.  $\angle AHB$
8.  $\angle DGB$

Decide whether the statement is *true* or *false*. Decide whether the converse is *true* or *false*. If both statements are *true*, write a biconditional statement.

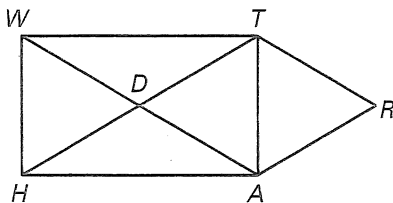
9. If a quadrilateral is a rectangle, then it is a parallelogram.
10. If a quadrilateral is a parallelogram, then it is a rhombus.
11. If a quadrilateral is a square, then it is a rhombus.
12. If a quadrilateral is a rectangle, then it is a rhombus.
13. If a rhombus is a square, then it is a rectangle.

Find the length or angle measure.

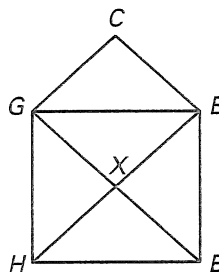
- |                                  |   |                                   |
|----------------------------------|---|-----------------------------------|
| 14. $WXYZ$ is a square.          | 15. $WXYZ$ is a rhombus.                      | 16. $WXYZ$ is a rectangle.        |
| $WX = 1 - 10x$                   | $m\angle X = 24(10 - x)^\circ$                | Perimeter of $\triangle XYZ = 24$ |
| $YZ = 14 + 3x$                   | $m\angle Z = 6(x + 15)^\circ$                 | $XY + YZ = 5x - 1$                |
| $XY = \underline{\quad ? \quad}$ | $m\angle Y = \underline{\quad ? \quad}^\circ$ | $XZ = 13 - x$                     |
|                                  |   | $WY = \underline{\quad ? \quad}$  |

Write a two-column or a paragraph proof.

17. Given:  $WHAT$  is a parallelogram.  
 $DART$  is a rhombus.  
 Prove:  $WHAT$  is a rectangle.



18. Given:  $\triangle GEC \cong \triangle GHX$   
 $GEBH$  is a parallelogram.  
 Prove:  $GEBH$  is a rhombus.



19. Given:  $JANE$  is a parallelogram.  
 $JXPE$  is a parallelogram.  
 $XP \perp EN$   
 Prove:  $JANE$  is a rectangle.

